

Product Information

LC 103 - Level Controller 103

Tank contents indicator with remaining volume check

Tank contents measurement up to 9.999 litres



LC 103 is an electronic instrument for indication of tank contents in litres and percentage of tank volume. All common tank shapes are supported. The measurement is done contactless using 40 kHz ultrasonic pulses.

The installation is very easy, the probe module is connected to the LC 103 via a 5 m cable.

LC 103 is maintenance free and highly reliable and supplied with batteries. LC 103 is a direct replacement for the mechanical gauges.

Features / Facilities

- Liters of tank volume and percent display
- Ullage in Liters
- distance to the tank level indicator sensor in cm
- Precise digital display
- Non-contact measurement
- Easy installation on the tank-top
- 2 threaded for screwing.
- Multiple measurements for maximum stability.
- Wall mount application included

LC 103 evaluates the propagation time of ultra-sonic pulses to detect the fluid level in the tank. Thus mechanical ageing problems cannot arise. All tank forms in common use are supported like cubic, cylindrical tanks, in horizontal or vertical position. From this information the tank contents in litres is calculated, also the average demand per day and the remaining time period based on average demand is derived.

Applications:

- Heating oil, water tanks, rainwater tanks, waste oil tanks, ...

LC 103 provides the following values:

- Tank contents in litres up to 9.999 litres
- Tank contents in percent of volume
- Remaining empty tank volume in litres – how many litres can be refuelled
- Distance to the fluid surface in cm
- Average demand in litres/day
- Remaining time period in days based on average demand

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Technical specification

Dimensions (l x w x h):	110 x 85 x 55 mm
Weight (incl. batteries):	Screw thread: 1.5 inch (6/4") and 2 inch app. 380 g
Housing:	colour black, oil resistive
Protection:	IP 20 as per EN 60529 indoor usage only, in cellars, tank rooms etc.
Display:	LC-display 51 mm x 35 mm, 2 lines with 4 digits, 12 and 14 mm high
Temperature range:	-10°C ... +45°C
Power supply:	4 alkaline batteries, type AA, 1.5 V
Battery life time:	app. 2 years, warning symbol for weak batteries

LC 100 is CE-marked and manufactured conform to ROHS requirements.

Measurement method:

Principle:	Ultra-sonic pulses, 40 kHz, pulse duration: 20 ms
Range:	20 cm ... 250 cm (distance to the fluid surface)
Uncertainty:	±1 cm

Installation:

Screw sensor into the tank thread 1.5" (6/4") or 2"
Connect housing wire with sensor plug/ (plug diameter 10mm)

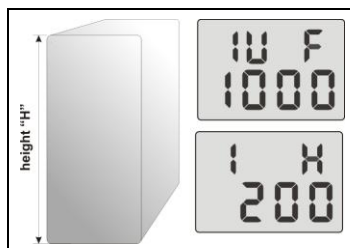
Standard mode:

Every 24 hours a measurement is taken, the tank contents in litres and volume percentage will be displayed hereafter.

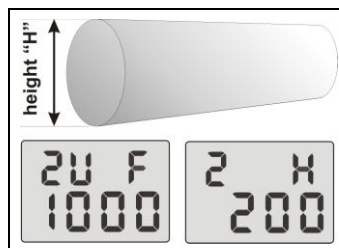
Manual measurement mode:

A button press initiates a single measurement, tank content is displayed- afterwards the LC 103 goes back to power saving mode.

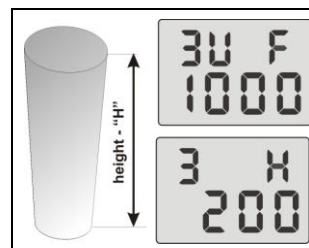
Tank types: Type 1



Type 2



Type 3



Order No.: ST001004

Scope of delivery:

LC 103, wall mounting set, probe module with 5 m connection cable, operating instructions, 4 batteries 1.5 V type AA, alkaline.

DESIGN & DEVELOPMENT By



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